Patent Attorney's Docket No. <u>028723-060</u>

Ely wearing)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

#34|F

In re Patent Application of

GRAY et al

Application No.: 08/477,316

Filed: June 7, 1995

For: CHROMOSOME-SPECIFIC STAINING

TO DETECT GENETIC

REARRANGEMENTS (AS AMENDED)

Group Art Unit: 1631

Examiner: A. Marschel

Plunkett 8/27/01

AMENDMENT

Assistant Commissioner for Patents Washington, D.C. 20231

Sir:

Please amend the above-cited application as follows:

IN THE SPECIFICATION

Please replace the title of the application with the amended title shown below:

CHROMOSOME-SPECIFIC STAINING TO DETECT GENETIC REARRANGEMENTS

IN THE CLAIMS

Please replace claims 1, 48 and 50 with the amended claims shown below:

1. (Five times Amended) A method of staining targeted interphase chromosomal material based upon a nucleic acid segment employing a unique sequence high complexity nucleic acid probe of greater than about 50,000 bases, wherein said targeted chromosomal material is a genetic rearrangement associated with at least one chromosome in humans, said method comprising employing said chromosomal material and a unique sequence high complexity nucleic acid probe of greater than about 50,000 bases in *in situ* hybridization,

